Senecio lusitanicus (Asteraceae, Senecioneae), a new combination for a species from Iberian Peninsula

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Abstract

A new combination *Senecio lusitanicus* (Cout.) R. Pérez-Romero is proposed for a taxon previously treated as a subspecies of *S. doronicum* (L.) L. or *S. lagascanus* DC. It is endemic to the west of the Iberian Peninsula.

Introduction

A study of morphological and palynological characters of *Senecio* sect. *Crociseris* (Asteraceae, Senecioneae) from Iberian Peninsula (Pérez Romero 2007, unpubl.), reveals that the following new combination is necessary:

***Senecio lusitanicus* (Cout.) R. Pérez-Romero, comb. et stat. nov.**

Basionym: *Senecio doronicum* (L.) L. subsp. *lusitanicus* Cout., Fl. Port.: 641 (1913). Synonym: *Senecio lagascanus* DC. subsp. *lusitanicus* (Cout.) P. Silva, Fl. Voy. Portugal Link (Hist. Desensolv. Ciênc. Portugal, 2): 955 (1987).

Pereira Coutinho (1913) described a new subspecies: *S. doronicum* subsp. *lusitanicus* Cout. It is characterized by subentire leaves, small capitula, supplementary bracts which are smaller than involucral bracts, and lower part of stems arachnoid-lanate (Amaral Franco 1984). In contrast, Chater & Walters (1976) recognized that *S. doronicum* subsp. *lusitanicus* was probably referable to *S. lagascanus* and Pinto da Silva (1987) regarded this taxon as a subspecies of *S. lagascanus*. Detailed morphological study (Pérez Romero 2007, unpubl.) shows that *S. lusitanicus* is morphologically different from other species (Table 1).

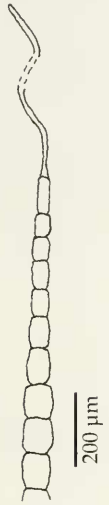
A limited number of pollen morphology studies have previously been undertaken for the genus *Senecio* (Stix 1960, Tormo et al. 1985, Díez 1987, Blanca et al. 1988, 1991, Otieno & Tadesse 1992, Hodálová & Mártonfi 1995, Pérez Romero

et al. 2003). As a result of our study (Pérez Romero 2007, unpubl.), we conclude that pollen of *S. lusitanicus* is clearly distinct in size and ornamentation from the related species of *Senecio* (Table 1; Figs. 1B, C).

We consider the differences between the taxa studied important enough to elevate the taxonomic status (Table 1).

Table 1. Comparison between *Senecio lusitanicus* and related species.

Characters	*S. doronicum*	*S. lagascanus*	*S. lusitanicus*
Plant height	30–60 (27–73) cm	24–60 (18–68) cm	14–23 (50) cm
Leaf base	gradually narrowed into the petiole	gradually narrowed into the petiole	truncate to attenuate
Indumentum	sparsely hairy, more abundant lower part of stems and petioles	sparsely hairy, more abundant lower part of stems and petioles	arachnoid-lanate, more abundant lower part of stems and petioles
Trichomes	10 or more short or elongated cylindrical cells and a long (< 300 µm), curled apical cell	8–10 short or elongated cylindrical cells and a long (> 300 µm), curled apical cell	8–10 short or elongated cylindrical cells and a long (> 500 µm), curled apical cell (Fig. 1A)
Length of involucral bracts	10–13 mm	6,5–10,5 (12) mm	8–10 mm
Length of ligulate flowers	22–37 mm	15–25 mm	13–19,5 mm
Length of pappus	6–9 mm	5,5–8 mm	5–6,5 mm
Pollen size: polar axis (in equatorial view)	37–40,5 (33,5–45,5) µm (Fig. 1C)	30,5–34 (27,5–36) µm	31–35 (28–38) µm (Fig. 1B)
Pollen size: equatorial axis (in equatorial view)	35,5–40 (30–44,5) µm (Fig. 1C)	28,5–34 (25,5–37) µm	30–32 (27–35) µm (Fig. 1B)
Ornamentation of pollen grains (SEM)	Perforate-fossulate-reticulate	Perforate-fossulate-reticulate	Fossulate, little perforate



A

B

C

Fig 1.

A. Uniseriate trichome of *S. lusitanicus*.
B. Pollen grain of *S. lusitanicus* (equatorial view, LM).
C. Pollen grain of *S. doronicum* (equatorial view, LM).

S. lusitanicus is endemic to the west of the Iberian Peninsula (Portugal; Fig. 2), on the other hand *S. doronicum* is distributed in the north of Spain and *S. lagascanus* in the middle north and east of Spain.

Fig. 2.

Map of Iberian Peninsula: geographic distribution of *S. lusitanicus* (+).

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